REMARKS

In this Amendment, Applicant has amended Claim 1 and added Claim 13. Claim 1 has been amended to specify different embodiments of the present invention and overcome the rejection. It is respectfully submitted that no new matter has been introduced by the amended and added claims. All claims are now present for examination and favorable reconsideration is respectfully requested in view of the preceding amendments and the following comments.

REJECTIONS UNDER 35 U.S.C. § 112 SECOND PARAPGRAPH:

Claims 1 – 12 have been rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is respectfully submitted that the currently presented amendments clearly point out and define the embodiment of the present invention. More specifically, Claim 1 has been amended to replace the term "compatible with at least 10wt% of water" with the term "soluable in water at 20°C." The amendment is sufficiently supported by the examples and the drawings in the specification. In addition, Figs. 2 – 4 and 6 show scanned electronic microphotographs of microcuts of the film according to the present invention wherein there are voids (spaces), which are formed at the places of the hudrophilic phase when the film samples are held for 2 second in water. This operation is carried out at 20°C.

In addition, Applicant would like to emphasize that the limitation of "compatible with at least 10wt% of water" is based on the weight of the hydrophilic compound. This is a concrete quantitative characteristic of the hydrophily establishing the criterion of selection (choice) of hydrophilic compounds suitable to achieve of the object of the present invention . The hydrophilic compounds are selected from the group that includes those that can swell in water, absorbing (but not adsorbing_like bentonite and other

silicates) more than 10 wt. % of water and those that are soluble in water. (p. 6, lines 7-9 of WO 02/078455).

Therefore, the rejection under 35 U.S.C. § 112, second paragraph, has been overcome. Accordingly, withdrawal of the rejections under 35 U.S.C. § 112, second paragraph, is respectfully requested.

REJECTIONS UNDER 35 U.S.C. § 102:

Claims 1 – 2, 4 – 8 and 12 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Julius (US Pat. No. 3,329,509), hereinafter Julius.

Applicant traverses the rejection and respectfully submits that the presently claimed invention is not anticipated by the cited reference. More specifically, Claim 1 has been amended to define "a single-layer polymer film for food products, consisting essentially of a polyamide matrix and a component providing high permeability of the film with respect to smoke substances and water vapors, wherein said component is a hydrophilic compound in an amount of 4.5-50.0 wt. % of the total weight of the film, and said hydrophilic compound: i) forms in the polyamide matrix a highly dispersed phase with a linear domain size of 0.1-3.0 μm in a direction perpendicular to a surface of the film in the polymide matrix, and ii) is soluable in water at 20°C." These features are not disclosed or suggested by Julius. Claims 2, 4 – 8 and 12 also include these features due to their dependence on Claim 1.

Applicant respectfully submits that it is incorrect to conclude that Julius discloses a highly dispersed phase. In the cited example 7, column 4, line 5 of the Julius reference, the use of polyvinyl alcohol, already made insoluble in water by heat treatment, is described. However, preliminarily treated polyvinyl alcohol in accordance with the Julius reference both in that example and in the specification (see column 1 line 64 – column 2, line 6) is used as a film-forming material (which corresponds to the polyamide matrix in the present invention), and not as a hydrophilic ingredient. This is shown by its content in the polymer composition (620 G or 62% of the total weight of the

composition), wherein Rice starch (50 G), Potato starch (130 G), Zeine (50 G) and Starch acetate (50 G) are used as the hydrophilic compound (in all 280 G), and Glycerine – as the plasticizer. Furthermore, in this example, as in all the others, the film-forming material is placed first in the list of components of the film. Consequently, polyvinyl alcohol in this case does not form a dispersion phase, but to the contrary is the matrix of the composition material of the film. Therefore, in this case, consideration should not be given to such characteristics thereof as degree of hydrolysis and solubility prior to heat treatment.

Moreover, Julius (col.2, lines 26-29) indicates that "the hydrophilic adjuvant, which is present in the film as grains or discrete particles dispersed through said film, constitutes water vapor permeable passages through the substantially impermeable film-forming material". The word "passage" has in this context a single interpretation, that is, continuous region of higher permeability, expanding from one surface of the film to another surface of the film, these regions remaining discrete in relation to the plane of the film. Such composite film morphology correlates well with its higher vapor permeability.

Therefore, since the particles or grains of hydrophilic compound form such "passages" in said film, the size of the particles or grains of the hydrophilic compound according to Julius should be comparable with the thickness of the manufactured film. In Julius, a film thickness is not disclosed. However, self-supporting wrapping films would hardly have a thickness of 0.1-3 microns. Such thickness should have a film according to Julius, in case the size of "granules or discrete particles" forming the "passages" according to Julius, coincide with the sizes of hydrophilic domains (particles) of the present invention. Producing films with such a thickness is technically difficult even today. It is well known that, for example, polyamide sausage casing has the requisite strength and mechanical modulus at the thickness of at least 50-60 μm, in case it is unoriented (as in Julius), and 20-30 μm in case it is oriented.

Thus, the particle size of hydrophilic compound of the Julius (50-60 μm in thickness) and the particle size of hydrophilic compound of the present invention (0.1-

3.0 μm) is substantially different. Accordingly, hydrophilic ingredient according to Julius cannot form a highly dispersed phase in a film-forming polymer in any way, as it is claimed in the present invention.

On the other hand, looking at microphotos of film microcuts illustrating examples of the present application (Figs. 2, 4), one can see uniformly distributed through the thickness of films small particles (domains) of hydrophilic additive but nothing that may be denoted by the word "passages". However, the results of the present research showed that precisely the formation of small particles of hydrophilic additive (highly dispersed phase) provides the achievement of the technical result of the present invention and is a critical feature thereof.

This fact is supported by experimental data disclosed in the specification of the present application concerning different hydrophilic additives selected from one class of polymeric compounds. In Examples 3 and 4 (comparative) wherein PVA with different hydrolysis degree is used as hydrophilic compound, it is apparently shown that polyamide film has sufficient permeability with respect to the smoke substances and vapor only in case when hydrophilic compound forms highly dispersed phase. It should be noted that PVA with high hydrolysis degree and insoluble in cold water (as PVA according to Julius) is used in comparative example 4, wherein highly dispersed phase is not formed.

Thus, the Examiner's conclusion that in Julius film PVA forms a highly dispersed phase in polyamide is not in conformity with established facts.

Furthermore, although Julius indicates that for realization of its invention, the author names a third component a water-soluble agent, which is desirably added to the mix, and which facilitates vapor-permeability of the film. In the set of claims of Julius, it indicates **three components** for producing a polymeric film. Thus, it is obvious that, to provide a self-supporting film with vapor-permeability, assuring sufficient satisfactory moisture evaporation in the process of sausage curing, it is necessary to use the third component-water-soluble agent in the polymeric mixture according to Julius.

Applicant once again draws the Examiner's attention to the fact that according to Julius, the membrane comprises three components while the present application claims a two component polymer film. Therefore, the Applicant's film is different from the film disclosed by Julius and for a person skilled in the art. It is not obvious that following the teaching of Julius document one can achieve the technical result according to the present invention.

Returning to the aluminum silicates, such as bentonite and montmorillonite, mentioned in the Julius document: "Montmorillonite is a clay mineral from the subclass of laminated silicates with a variable chemical composition (Ca, Na) (Mg, Al, Fe)$_2$ [(Si, Al)$_4$ O$_{10}$] (OH)$_2$xnH$_2$O. It forms compact clay masses. Upon moistening, it strongly swells as a result of the ingress of water into the space between the layers of the structure, has adsorbing and saponifying properties. Montmorillonite is a typical product of pneumatolysis of aluminosilicates under conditions of an alkaline medium. The main component is bentonites, colloidal clays." (LSE – excerpts, the page http:www.oval.ru/enc/44362.html/ may be downloaded).

Therefore, even though these minerals have adsorbing properties, they are not low molecular weight compounds soluble in water.

In addition, Applicant respectfully requests the Examiner refer to the arguments earlier presented in respect to the cited Julius document (see pages 11 – 15 of the response previously submitted on December 19, 2005 in response to the Office Action mailed August 23, 2005).

REJECTIONS UNDER 35 U.S.C. § 103:

Claims 3, and 9 – 11 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Strutzel in view of Julius.

Applicant traverses the rejection and respectfully submits that the embodiments of present-claimed invention are not obvious over Strutzel in view of Julius. The significant differences between the present invention and Julius have been discussed as above. The differences between the present invention and Strutzel has been discussed in detail in previous response (see pages 10 – 11 of the response previously submitted on December 19, 2005 in response to the Office Action mailed August 23, 2005).

Due to above indicated differences, there is no motivation or reasonable expectation of success to combine Strutzel with Julius. Therefore, Even if they are combined, a person of ordinary skill in the art will not discern the present invention at time of its invention.

In summary, the newly presented claims are not obvious over Strutzel in view of Julius. The rejection under 35 U.S.C. § 103 has been overcome. Accordingly, withdrawal of the rejections under 35 U.S.C. § 103 is respectfully requested.

Having overcome all outstanding grounds of rejection, the application is now in condition for allowance, and prompt action toward that end is respectfully solicited.

Respectfully submitted,

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